

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
PO37858	ACI001-VC	1	1	Net 30	M1018R2.250	M1018R2.250 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108				3		3		S000798	Stock	10/17/2017	\$ 12.21 / ft	0		\$36.62	Acier Ouellette Inc.	
		2			M1018R0.750	M1018R0.750 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108				20		18		S000799	Stock	10/17/2017	\$ 1.17 / ft	0		\$21.17	Acier Ouellette Inc.	
		3			M1018B1.000X06.000	1010-1025 Steel Bar 1.000 X 6.000 : MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W				6		6		S000800	Stock	10/17/2017	\$ 30.42 / ft	0		\$182.52	Acier Ouellette Inc.	
		4			M304R.500	304 SS roundbar .500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE				36		36		S000801	Stock	10/17/2017	\$ 1.91 / ft	0		\$68.66	Acier Ouellette Inc.	
		5			M6061T6R1.375	6061-T6 Round Bar 1.375" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221				12		12		S000802	Stock	10/17/2017	\$ 5.68 / ft	0		\$68.21	Acier Ouellette Inc.	
		6			MT-1144-R0.625	1144 Steel Proof Round Bar 0.625"				10		10		S000803	Stock	10/17/2017	\$ 2.12 / ft	0		\$21.22	Acier Ouellette Inc.	
		7			M4140H-R1.000	4140 round bar 1.00				3		3		S000804	Stock	10/17/2017	\$ 5.62 / ft	0		\$16.85	Acier Ouellette Inc.	
		8			M4140H-R1.750	4140 Round Bar 1.750 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434-BC/-A193-03-GRADE B7/-A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI						3		S000805	Stock	10/17/2017	\$ 19.33 / ft	0		\$57.98	Acier Ouellette Inc.	
		9			M4140NB0.500x1.625	4140 Steel Bar 0.500 X 1.625 : AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529							3		S000806	Stock	10/17/2017	\$ 26.67 / ft	0		\$80.00	Acier Ouellette Inc.
		11			MT-1144-R0.750	1144 Steel Proof Round Bar 0.750"				10	10/6/2017	10		S000808	Stock	10/17/2017	\$ 2.84 / ft	0		\$28.40	Acier Ouellette Inc.	
		12			MT-1144-R1.000	1144 Steel Proof Round Bar 1.000"						10		S000809	Stock	10/17/2017	\$ 5.47 / ft	0		\$54.70	Acier Ouellette Inc.	
Total:										116		114								\$507.26		



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
PO37858	ACI001-VC	12	1	Net 30	MT-HRS-P-0.3125	Hot Rolled Steel Plate 0.3125" (44W)				16	10/6/2017	16		S001352	Stock	10/23/2017	\$ 9.05 / ft	0		\$144.80	Acier Ouellette Inc.	
		13			M4140H-R0.500	4140 round bar 0.500"				12		12		S001353	Stock	10/23/2017	\$ 2.85 / ft	0		\$34.20	Acier Ouellette Inc.	
Total:										28		28									\$141.66	

Plex 10/23/2017 1:35 PM Dart.Plouffe.Sonia



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO37858

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO37858
PO Date: 9/25/17
Due Date: 10/6/17
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pymt Terms: net 30
Freight Terms:
Special Comments:

Items

Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
12	MT-HRS-P-0.3125		Hot Rolled Steel Plate 0.3125" (44W)		Firmed	10/6/17	16 ft	0 ft 16 ft	16 ft	\$9.05/ft	\$144.80
13	M4140H-R0.500		4140 round bar 0.500"		Firmed	10/6/17	12 ft	0 ft 12 ft	12 ft	\$2.85/ft	\$34.20
Grand Total:											\$179.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/18/17 3:59 PM Dart.baker.diane



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO37858

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO37858
PO Date: 9/25/17
Due Date: 10/6/17
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pymt Terms: net 30
Freight Terms:
Special Comments:

Items												
Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price	
1	M1018R2.250	-	M1018R2.250 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108		Firmed	10/6/17	3 ft	0 ft 3x	3 ft	\$12.206666/ft	\$36.62	
2	M1018R0.750	-	M1018R0.750 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108		Firmed	10/6/17	20 ft	0 ft 2x B.11	20 ft	\$1.169/ft	\$23.38	
3	M1018B1.000X06.000	-	1010-1025 Steel Bar 1.000 X 6.000 : MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W		Firmed	10/6/17	6 ft	0 ft 6x	6 ft	\$30.42/ft	\$182.52	
4	M304R.500	-	304 SS roundbar .500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE		Firmed	10/6/17	36 ft	0 ft 36x	36 ft	\$1.9072222/ft	\$68.66	
5	M6061T6R1.375	-	6061-T6 Round Bar 1.375" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-		Firmed	10/6/17	12 ft	0 ft 12x	12 ft	\$5.6841666/ft	\$68.21	



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO37858

Items											
Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
			200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221								
6	MT-1144-R0.625	-	1144 Steel Proof Round Bar 0.625"		Firmed	10/6/17	10 ft	0 ft 10ft	10 ft	\$2.122/ft	\$21.22
7	M4140H-R1.000	-	4140 round bar 1.00		Firmed	10/6/17	3 ft	0 ft 3ft	3 ft	\$5.616666/ft	\$16.85
8	M4140H-R1.750	-	4140 Round Bar 1.750 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434-BC/-A193-03-GRADE B7/-A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI		Firmed	10/6/17	3 ft	0 ft 3ft	3 ft	\$19.326666/ft	\$57.98
9	M4140NB0.500x1.625	-	4140 Steel Bar 0.500 X 1.625 : AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529		Firmed	10/6/17	3 ft	0 ft 3ft	3 ft	\$26.666666/ft	\$80.00
10					firmed	10/6/17	16 ft	0 ft	16 ft	\$9.04625/ft	\$144.74
11	MT-1144-R0.750	-	1144 Steel Proof Round Bar 0.750"		Firmed	10/6/17	10 ft	0 ft 10ft	10 ft	\$2.84/ft	\$28.40
12	MT-1144-R1.000	-	1144 Steel Proof Round Bar 1.000"		Firmed	10/6/17	10 ft	0 ft 10ft	10 ft	\$5.47/ft	\$54.70
Grand Total:											\$783.28

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/5/17 3:04 PM dart.lavoie.chantal



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 1 of 6

Order From :

VC-CAM002

ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
SEP 25 2017

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M1018R2.250	M1018R2.250	10/6/2017 Yes 10/6/2017		3.00 f	\$12.21	\$36.62

MATERIAL: AISI 1018-1025 ROUND BAR AS PER
MIL-S-7097 OR ASTM A108

Line Total: \$36.62

2	M1018R0.750	M1018R0.750	10/6/2017 Yes 10/6/2017		20.00 f	\$1.17	\$23.38
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MATERIAL: AISI 1018-1025 ROUND BAR AS PER
MIL-S-7097 OR ASTM A108

recu. 18.11

SEP 10 17

Line Total: \$23.38

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 2 of 6

Order From :

VC-CAM002

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

3	M1018B1.000X06.000	1010-1025 Steel Bar 1.000 x 6.000	10/6/2017	6.00	\$30.42	\$182.52
			Yes	f		
			10/6/2017			

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W

Line Total: \$182.52

4	M304R.500	304 SS roundbar .500	10/6/2017	36.00	\$1.91	\$68.66
			Yes	f		
			10/6/2017			

MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276

(NOTE: AISI 303 NOT ACCEPTABLE)

Line Total: \$68.66

5	M6061T6R1.375	6061-T6 Round Bar 1.375"	10/6/2017	12.00	\$5.68	\$68.21
			Yes	f		
			10/6/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM ROUND BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

SPA710-17

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 3 of 6

Order From :
ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

VC-CAM002

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 800 667 4248

Ship To Contact
Ship To Phone
Ship Via: Yours ppd
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: \$68.21

6 MT-1144-R0.750 1144 Steel Proof Round Bar 0.750" 10/6/2017 FN 10.00 \$2.84 \$28.39
Yes f
10/6/2017

MATERIAL AISI 1144 STRESSPROOF STEEL ROUND BAR PER
ASTM A311 OR UNS G11440

Line Total: \$28.39

7 MT-1144-R0.625 1144 Steel Proof Round Bar 0.625" 10/6/2017 FN 10.00 \$2.12 \$21.22
Yes f
10/6/2017

MATERIAL AISI 1144 STRESSPROOF STEEL ROUND BAR PER
ASTM A311 OR UNS G11440

Line Total: \$21.22

8 MT-1144-R1.000 1144 Steel Proof Round Bar 1.000" 10/6/2017 FN 10.00 \$5.47 \$54.65
Yes f
10/6/2017

MATERIAL AISI 1144 STRESSPROOF STEEL ROUND BAR PER
ASTM A311 OR UNS G11440

SPR 10-A.

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 4 of 6

Order From :

VC-CAM002

Ship To : DART AEROSPACE LTD

ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total: \$54.65

9 M4140H-R1.000 4140 round bar 1.00 10/6/2017 3.00 \$5.62 \$16.85
Yes f
10/6/2017

MATERIAL: AISI 4140 H ROUND BAR PER
AISI 4140 OR ASTM A304-02/-A-434-BC/-A193-03 GRADE-B7/-A29-03/-A332-91 OR UNS # G41400

Line Total: \$16.85

10 M4140H-R1.750 4140 Round Bar 1.750 10/6/2017 FN 3.00 \$19.33 \$57.98
Yes f
10/6/2017

MATERIAL: AISI 4140 H ROUND BAR PER
AISI 4140 OR ASTM A304-02/-A-434-BC/-A193-03 GRADE-B7/-A29-03/-A332-91 OR UNS # G41400

Line Total: \$57.98

11 M4140NB0.500x1.625 4140 Steel Bar 0.500 x 1.625 10/6/2017 3.00 \$26.67 \$80.00
Yes f
10/6/2017

MATERIAL: AISI 4140N STEEL BAR PER MIL-S-5626/AMS 6382/AMS6349/AMS6529

SPR-10-17

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 5 of 6

Order From :

VC-CAM002

ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total: \$80.00

10.
12 MT-HRS-P-0.3125

Hot Rolled Steel Plate
0.3125" (44W)

10/6/2017

16.00

Yes

10/6/2017

MATERIAL HOT ROLLED STEEL PLATE PER
ASTM A36/ASTM A1011 /44W OR ASTM A1018

recu 17-10-20 (papier)

\$9.05

\$144.74

Line Total: \$144.74

13 M4140H-R0.500

4140 round bar 0.500"

10/6/2017

12.00

Yes

10/6/2017

MATERIAL: AISI 4140 H ROUND BAR PER
AISI 4140 OR ASTM A304-02/-A-434-BC/-A193-03 GRADE-B7/-A29-03/-A332-91 OR UNS # G41400

recu (papier) 17-10-20

\$2.85

\$34.25

Line Total: \$34.25

Sp 17-10-17

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37858**

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 6 of 6

Order From :

ACIER OUELLETTE INC.
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

VC-CAM002

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 800 667 4248

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

14	71401-45	PROCUREMENT QUALITY CLAUSES	10/6/2017	1.00	\$0.00	\$0.00
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No

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

SEP 10 17

Line Total: \$0.00

PO Total: \$817.47

PO Instructions: QUOTATION: SOU0059954

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 9/25/2017



DELIVERY - CLIENT

CO00053066

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N° CLI0001056
Date 2017/09/25
Delivery date **2017/10/06**
Your order N° 37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 1

Billed to
DART AEROSPACE LTD
1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M**Delivery Route** 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 ROUND CR 2 1/4 1018 RANDOM RCR-214-V 5301 1 X 36" HEAT: 136550 COUPE A LA SCIE SCIE 1 DAS 5 9-89	40.56	3.00	PI_\$CLB								
2 ROUND CR 3/4 1018 RANDOM RCR-34-V 5332 1 X 20' R/L HEAT: 139625 DAS 5 9-89	30.00	20.00	PI_\$CLB								
3 FLAT CR 1 X 6 1018 RANDOM FCR-16-V 2775 1 X 6' HEAT: 3066812	122.40	6.00	PI_\$CLB								

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

CO00053066

ACIER OUELLETTE INC.

935, Boul. du H vre
Salaberry de Valleyfield (Qu bec) J6S 5L1
T l.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N  CLI0001056
Date 2017/09/25
Delivery date **2017/10/06**
Your order N  37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 2

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE T l.: 613-632-5200

Instruction F-M

Delivery Route 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
COUPE A LA SCIE SCIE 1		1.00	UN								
4 ROUND SS 1/2 304 RANDOM RSS-12-V 5730	24.01	36.00	PI_\$CLB								
3 X 12' R/L HEAT: 430W											
5 ROUND ALU 1 3/8 6061-T6 RANDOM RAL-138-V 5132	20.93	12.00	PI_\$CLB								
1 X 12' HEAT: 201616218											
TRANSFERT ST-JEROME LE 26-09											

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

CO00053066

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N° CLI0001056
Date 2017/09/25
Delivery date **2017/10/06**
Your order N° 37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 3

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M**Delivery Route** 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
7 ROUND STRESSPROOF 3/4 RANDOM RST-34-V 5815 1 X 10' HEAT: C124677 DAS COUPE A LA SCIE 5 SCIE 1 9-89	15.00	10.00	PI_\$CLB								
		1.00	UN								
8 ROUND STRESSPROOF 5/8 RANDOM RST-58-V 5822 1 X 10' HEAT: 20446680 DAS COUPE A LA SCIE 5 SCIE 1 9-89	10.40	10.00	PI_\$CLB								
		1.00	UN								

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

C000053066

ACIER OUELLETTE INC.

935, Boul. du H vre
Salaberry de Valleyfield (Qu bec) J6S 5L1
T l.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N  CLI0001056
Date 2017/09/25
Delivery date **2017/10/06**
Your order N  37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 4

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE T l.: 613-632-5200

Instruction F-M**Delivery Route** 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
9 ROUND STRESSPROOF 1 RANDOM RST-1-V 5804 DAS 1 X 10' HEAT: 015380 5 COUPE A LA SCIE 9-89 SCIE 1	26.70	10.00	PI_\$CLB								
		1.00	UN								
10 ROUND 4140 HEAT TREAT 1 RANDOM R4140-1H-V 4919 DAS 1 X 3' HEAT: C120427 5 COUPE A LA SCIE 9-89 SCIE 1	8.01	3.00	PI_\$CLB								
		1.00	UN								

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

CO00053066

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N° CLI0001056
Date 2017/09/25
Delivery date 2017/10/06
Your order N° 37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 5

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M**Delivery Route** 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
11 ROUND 4140 HEAT TREAT 1 3/4 RANDOM R4140-134H-V 4911 1 X 3' HEAT: 166509 COUPE A LA SCIE SCIE 1 DAS 5 9-89	24.53	3.00	PI_\$CLB								
12 PLATE 4140 HT 1/2 RANDOM NS P4140-12HT-V 8509 1 X 1 5/8" X 36" HEAT: 289214 OFFER 4140 HT NOT AVAILABLE IN 4140N AC9622-FU-27/09 DAS 5 9-89	10.21	0.50	PI2_\$CLB								

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

CO00053066

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N° CLI0001056
Date 2017/09/25
Delivery date **2017/10/06**
Your order N° 37858
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days
Page 6

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M**Delivery Route** 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
13 PLATE 44W 5/16 RANDOM P44-516-V 4124 <i>1 X 4' X 4' HEAT 0026C4</i> DAS 5 COUPE AU FEU 9-89 FEU 3	204.00	16.00	PI2_\$CLB								
14 ROUND 4140 HEAT TREAT 1/2 RANDOM R4140-12H-V 4907 DAS 5 <i>1 X 12' HEAT 190696</i> 9-89 TRANSFERT ST-JEROME LE 26-09	8.02	12.00	PI_\$CLB								

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 544.77**NIR : R-109516-6**

Prepared By :	Verified By :	Delivered By :	Time		Y	M	D
				Customer's Signature			
				Date			

Total (\$CAD)



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
Tfno.: 946480211
Fax: 946480128
Email: calpradera@calibradospradera.es
www.calibradospradera.es

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 44806

ALBARAN 44806
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

Nº PEDIDO Purchase Order	DESCRIPCIÓN Description	ESPALES Thickness	TOLERANCIA TOLERANCE	OF OF	MEDIDA Measurement
PAJ-46322	1018 RED. ESTIRADO 47,63 (1 7/8")	1.170	- 0,076	915794	47,63
PAR-46187	1045 RED. ESTIRADO 50,80 (2")	1.062	- 0,102	915559	50,80
OU-46514	1018 RED. ESTIRADO 42,86 (1 11/16")	1.116	- 0,076	136191	42,86
MJP-46560	1018 RED. ESTIRADO 63,50 (2 1/2")	1.078	- 0,076	136287	63,50
MJP-46560	1018 RED. TORNEADO 76,20 (3")	1.104	- 0,102	915720	76,20
PAR-46465	1018 RED. ESTIRADO 41,28 (1 5/8")	978	- 0,076	915595	41,28
OU-46534	1018 RED. ESTIRADO 50,80 (2")	1.076	- 0,076	133019	50,80
OU-46534	1018 RED. ESTIRADO 57,15 (2 1/4")	1.082	- 0,076	136550	57,15
PAR-46465	1018 RED. ESTIRADO 44,45 (1 3/4")	1.002	- 0,076	915642	44,45
PAR-46465	1045 RED. ESTIRADO 50,80 (2")	1.060	- 0,102	915559	50,80
PAJ-46606	1018 RED. TORNEADO 101,6 (4")	1.170	- 0,102	915786	101,60
PAJ-46636	1018 RED. TORNEADO 76,20 (3")	1.104	- 0,102	915720	76,20
PAJ-46636	1018 RED. ESTIRADO 41,28 (1 5/8")	2.096	- 0,076	915595	41,28
PAJ-46636	1018 RED. ESTIRADO 44,45 (1 3/4")	850	- 0,076	915642	44,45
PAR-46496	1018 RED. ESTIRADO 63,50 (2 1/2")	1.076	- 0,076	915850	63,50
MJP-46589	1018 RED. ESTIRADO 50,80 (2")	986	- 0,076	136876	50,80
MJP-46589	1018 RED. ESTIRADO 57,15 (2 1/4")	1.082	- 0,076	136877	57,15
MN-45449	1018 RED. ESTIRADO 63,50 (2 1/2")	924	- 0,076	915850	63,50
MN-45449	1018 RED. TORNEADO 76,20 (3")	1.104	- 0,102	915720	76,20
MN-45449	1018 RED. TORNEADO 88,90 (3 1/2")	902	- 0,102	915641	88,90
PAR-46825	1018 RED. ESTIRADO 61,91 (2 7/16")	1.076	- 0,076	135756	61,91

Composición química de la colada / Chemical Analysis of Heat

MEDIDA Measurement	OF	COLADA Cast Nr.	% C	% Mn	% P	% S	% Si
47,63	915794	40212 IS	0,170	0,680	0,020	0,003	0,320
50,80	915559	40209 IS	0,445	0,680	0,012	0,025	0,310
42,86	136191	39873 IS	0,180	0,740	0,015	0,004	0,310
63,50	136287	40570 IS	0,160	0,680	0,013	0,022	0,300
76,20	915720	40324 IS	0,170	0,610	0,013	0,020	0,290
41,28	915595	39873 IS	0,180	0,740	0,015	0,004	0,310
50,80	133019	39235 A	0,161	0,733	0,020	0,018	0,196
57,15	136550	40585	0,170	0,700	0,010	0,017	0,100
44,45	915642	40006 A	0,164	0,658	0,008	0,027	0,184
50,80	915559	40209 IS	0,445	0,680	0,012	0,025	0,310
101,60	915786	39882 A	0,163	0,724	0,019	0,026	0,174
76,20	915720	40324 IS	0,170	0,610	0,013	0,020	0,290
41,28	915595	39873 IS	0,180	0,740	0,015	0,004	0,310
44,45	915642	40006 A	0,164	0,658	0,008	0,027	0,184
63,50	915850	40570 IS	0,160	0,680	0,013	0,022	0,300
50,80	136876	40014 IS	0,160	0,710	0,011	0,005	0,340
57,15	136877	40585	0,170	0,700	0,010	0,017	0,100



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
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www.calibradospradera.es

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN-10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 44806

ALBARAN 44806
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

			% C	% Mn	% P	% S	% Si
63,50	915850	40570 IS	0,160	0,680	0,013	0,022	0,300
76,20	915720	40324 IS	0,170	0,610	0,013	0,020	0,290
88,90	915641	39884 IS	0,170	0,710	0,010	0,003	0,310
61,91	135756	40309 IS	0,160	0,710	0,016	0,003	0,330

Características mecánicas / Mechanical properties

MEDIDA Measurement	OF	COLADA Cast Nr.	Resistencia Tens. strength N/mm ²	Lím.elástico Yield point 0,2% N/mm ²	Alargamiento Elongation Lo=50 mm.	Dureza HB Hardness HB
47,63	915794	40212 IS	0,00	0,00	0,00	154,00
50,80	915559	40209 IS	0,00	0,00	0,00	227,00
42,86	136191	39873 IS	0,00	0,00	0,00	142,00
63,50	136287	40570 IS	0,00	0,00	0,00	156,00
76,20	915720	40324 IS	455,81	321,93	35,00	146,00
41,28	915595	39873 IS	0,00	0,00	0,00	142,00
50,80	133019	39235 A	480,20	338,10	31,00	0,00
57,15	136550	40585	478,00	305,00	33,00	133,00
44,45	915642	40006 A	450,80	317,46	0,00	0,00
50,80	915559	40209 IS	0,00	0,00	0,00	227,00
101,60	915786	39882 A	480,20	338,10	28,00	0,00
76,20	915720	40324 IS	455,81	321,93	35,00	146,00
41,28	915595	39873 IS	0,00	0,00	0,00	142,00
44,45	915642	40006 A	450,80	317,46	0,00	0,00
63,50	915850	40570 IS	0,00	0,00	0,00	156,00
50,80	136876	40014 IS	0,00	0,00	0,00	155,00
57,15	136877	40585	478,00	305,00	33,00	133,00
63,50	915850	40570 IS	0,00	0,00	0,00	156,00
76,20	915720	40324 IS	455,81	321,93	35,00	146,00
88,90	915641	39884 IS	449,82	317,52	29,00	155,00
61,91	135756	40309 IS	0,00	0,00	0,00	145,00

Calidad Superficial

DESCRIPCIÓN Description	OF	Clase EN 10277-1

Observaciones: BARRAS DE ACERO ESTIRADAS / TORNEADAS EN FRIO SIN ALEAR



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
Tfno.: 946480211
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Email: calpradera@calibradospradera.es
www.calibradospradera.es

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 44806

ALBARAN 44806
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.

QUALITY DEPARTMENT: Certify that the product fulfils the order specifications.

Fecha/Date: 11/11/2016

Firmado: Susana Fernández
Directora de Calidad



Sistema de
Gestión
ISO 9001:2008

www.tuv-rh.com
ID 1100060224



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
Tfno.: 946480211
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CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 47862

ALBARAN 47862
Delivery Note Nr.

CLIENTE LES ACIERS TRANSPEC (1997) LTÉE
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

Nº PEDIDO Purchase Order	DESCRIPCIÓN Description	KGS.	TOLERANCIA TOLERANCE	OF	MEDIDA Measurement
VI 46700	12L14 RED. ESTIRADO 25,40 (1")	1.004	- 0,051	207437	25,40
PAR-47782	1018 RED. ESTIRADO 25,00	1.822	- 0,051	139761	25,00
PAR-47785	1018 RED. ESTIRADO 25,00	3.982	- 0,051	139283	25,00
PAR-47786	12L14 RED. ESTIRADO 12,70 (1/2")	1.000	- 0,051	137659	12,70
PAR-47795	1018 CUA. ESTIRADO 31,75 (1 1/4")	1.224	- 0,160	136439	31,75
SM-47572	1018 RED. ESTIRADO 15,88 (5/8")	1.008	- 0,051	916391	15,88
SM-47572	1018 RED. ESTIRADO 19,05 (3/4")	1.134	- 0,051	139479	19,05
OU-47832	12L14 RED. ESTIRADO 12,70 (1/2")	1.000	- 0,051	137659	12,70
OU-47832	1018 RED. ESTIRADO 19,05 (3/4")	1.190	- 0,051	139625	19,05
PAJ-48073	1018 CUA. ESTIRADO 9,53 (3/8")	983	- 0,090	915990	9,53
PAJ-48073	1018 RED. ESTIRADO 15,88 (5/8")	1.150	- 0,051	916216	15,88
PAR-48154	1018 CUA. ESTIRADO 6,35 (1/4")	784	- 0,090	915673	6,35
PAR-48154	1018 RED. ESTIRADO 7,94 (5/16")	1.090	- 0,051	916609	7,94
PAR-48154	1018 RED. ESTIRADO 22,23 (7/8")	3.034	- 0,051	139773	22,23
PAR-48154	12L14 RED. ESTIRADO 15,88 (5/8")	824	- 0,051	916509	15,88
MJP-47896	12L14 RED. ESTIRADO 25,40 (1")	784	- 0,051	207437	25,40
PAR-48154	1018 RED. ESTIRADO 28,58 (1 1/8")	744	- 0,051	916104	28,58
MN-47094	1018 RED. ESTIRADO 22,23 (7/8")	1.012	- 0,051	139824	22,23

Composición química de la colada / Chemical Analysis of Heat

MEDIDA Measurement	OF	COLADA Cast Nr.	% C	% Cr	% Cu	% Mn	% Mo	% N	% Ni	% P	% Pb	% S	% Si
25,40 0,00	202437	41300 AG	0,060	0,086	0,014	1,130	0,005	0,000	0,023	0,063	0,300	0,310	0,003
25,00 0,00	139261	41403 G	0,150	0,000	0,000	0,630	0,000	0,000	0,000	0,007	0,000	0,014	0,135
25,00 0,00	139283	41403 G	0,150	0,000	0,000	0,630	0,000	0,000	0,000	0,007	0,000	0,014	0,135
12,70 0,00	137659	41136 AA	0,067	0,025	0,016	1,057	0,004	0,000	0,018	0,053	0,192	0,283	0,018
31,75 0,00	136439	40201	0,159	0,000	0,000	0,806	0,000	0,000	0,000	0,018	0,000	0,024	0,183
15,88 0,00	916391	40619 AA	0,145	0,000	0,000	0,775	0,000	0,000	0,000	0,013	0,000	0,027	0,157
19,05 0,00	139479	41379 AA	0,151	0,000	0,015	0,841	0,000	0,004	0,000	0,012	0,000	0,029	0,204
12,70 0,00	137659	41136 AA	0,067	0,025	0,016	1,057	0,004	0,000	0,018	0,053	0,192	0,283	0,018
19,05 0,00	139625	41379 AA	0,151	0,000	0,015	0,841	0,000	0,004	0,000	0,012	0,000	0,029	0,204
9,53 0,00	915990	40828 G	0,140	0,000	0,198	0,760	0,000	0,000	0,000	0,016	0,000	0,033	0,242
15,88 0,00	916216	40619 AA	0,145	0,000	0,000	0,775	0,000	0,000	0,000	0,013	0,000	0,027	0,157
6,35 0,00	915673	40073 G	0,150	0,000	0,000	0,770	0,000	0,000	0,000	0,007	0,000	0,026	0,235
7,94 0,00	916609	41174 GM	0,170	0,000	0,000	0,730	0,000	0,000	0,000	0,017	0,000	0,018	0,160
22,23 0,00	139773	41472 AG	0,173	0,000	0,132	0,817	0,000	0,003	0,000	0,010	0,000	0,022	0,218
15,88 0,00	916509	41252 AA	0,068	0,033	0,020	1,134	0,004	0,000	0,022	0,055	0,329	0,290	0,071
25,40 0,00	202437	41300 AG	0,060	0,086	0,014	1,130	0,006	0,000	0,000	0,023	0,063	0,300	0,003
28,58 0,00	916104	40910 G	0,155	0,000	0,000	0,635	0,000	0,000	0,000	0,013	0,000	0,016	0,137
22,23 0,00	139824	41472 AG	0,173	0,000	0,132	0,817	0,000	0,003	0,000	0,010	0,000	0,022	0,218

Características mecánicas / Mechanical properties



ARANA Y LUPARDO, 2
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CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR : 47862

ALBARAN 47862 Delivery Note Nr.	CLIENTE LES ACIERS TRANSBEC (1997) L.T.E. CUSTOMER
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Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

MEDIDA Measurement	OF	COLADA Cast Nr.	Resistencia Tens. strength N/mm2	Lím.elástico Yield point 0,2% N/mm2	Alargamiento Elongation Lo=50 mm.	Dureza HB Hardness HB	Estricción %
25,40	202437	41300 AG	556,11	543,10	19,46	159,00	46,32
25,00	139261	41403 G	558,02	541,20	18,34	169,00	61,11
25,00	139283	41403 G	558,02	541,20	18,34	169,00	61,11
12,70	137659	41136 AA	512,37	482,16	13,80	169,00	60,12
31,75	136439	40201	510,00	370,00	22,00	0,00	0,00
15,88	916391	40619 AA	579,16	547,66	19,70	169,00	58,82
19,05	139479	41379 AA	611,80	592,66	18,78	180,00	63,05
12,70	137659	41136 AA	512,37	482,16	13,80	169,00	60,12
19,05	139625	41379 AA	611,80	592,66	18,78	180,00	63,05
9,53	915990	40828 G	783,23	761,48	10,92	247,00	0,00
15,88	916216	40619 AA	574,47	549,90	20,16	162,00	64,21
6,35	915673	40073 G	822,40	791,50	7,94	258,00	47,07
7,94	916609	41174 GM	754,80	715,70	12,24	216,00	58,26
22,23	139773	41472 AG	573,78	552,34	25,92	172,00	57,86
15,88	916509	41252 AA	622,39	607,75	12,72	200,00	48,37
25,40	202437	41300 AG	556,11	543,10	19,46	159,00	46,32
28,58	916104	40910 G	568,80	546,30	32,76	169,00	59,00
22,23	139824	41472 AG	573,78	552,34	25,92	172,00	57,86

Calidad Superficial

DESCRIPCIÓN Description	OF	Clase EN 10277-1
12L14 RED. ESTIRADO 25,40 (1")	202437	3
1018 RED. ESTIRADO 25,00	139261	2
1018 RED. ESTIRADO 25,00	139283	2
12L14 RED. ESTIRADO 12,70 (1/2")	137659	3
1018 RED. ESTIRADO 15,88 (5/8")	916391	2
1018 RED. ESTIRADO 19,05 (3/4")	139479	2
12L14 RED. ESTIRADO 12,70 (1/2")	137659	3
1018 RED. ESTIRADO 19,05 (3/4")	139625	2
1018 RED. ESTIRADO 15,88 (5/8")	916216	2
1018 RED. ESTIRADO 7,94 (5/16")	916609	2
1018 RED. ESTIRADO 22,23 (7/8")	139773	2
12L14 RED. ESTIRADO 15,88 (5/8")	916509	3
12L14 RED. ESTIRADO 25,40 (1")	202437	3
1018 RED. ESTIRADO 28,58 (1 1/8")	916104	2
1018 RED. ESTIRADO 22,23 (7/8")	139824	2



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
Tfno.: 946480211
Fax: 946480128
Email: calpradera@calibradospradera.es
www.calibradospradera.es

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 47862

ALBARAN 47862
Delivery Note Nr.

CLIENTE LES ACHIERS TRANSBEC (1997) LTÉE
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

Observaciones: BARRAS DE ACERO ESTIRADAS EN FRIO SIN ALEAR

DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.

QUALITY DEPARTMENT: Certify that the product fulfils the order specifications.

Fecha/Date: 19/06/2017

Firmado: Susana Fernández
Directora de Calidad



Sistema de
Gestión
ISO 9001:2008

www.tuv.com
ID: 1105489024

Facture 699358

FCR-16

Flat CR 176
H6961



EAGLE BAR INC.

3719 S. Kedzie Ave.
Chicago, Illinois 60632
800-621-6126
In Ill. Call (773)847-5382
(773)847-5287

Inspection No. 2010995 Page

Date: 01-25-2016 1 of 2

COLD FINISHED STEEL TEST CERTIFICATE

Customer: LES ACIERS TRANSBEC(1997)
LTEE

LAVAL, QUEBEC ()

Delivery Note: 18346

P.O.Nº.	Shape	Size	Quality	Lbs.	Remarks
1 CA-44099	RD	1.1/4 (1,2496''-1,2492'')	12L14	2,222	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
2 CA-44099	FLAT	1'' x 2	SAE1018	2,458	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
3 CA-44099	RD	2.1/2 (2,5000''-2,4976'')	SAE1018	2,227	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
4 CA-44099	RD	4'' (4,0000''-3,9961'')	SAE1018	2,438	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
5 CA-44099	SQ	1.1/8 ()	SAE1018	2,388	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
6 CA-44099	SQ	4'' ()	SAE1018	2,637	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
7 OU-45163	FLAT	1/2'' x 5	SAE1018	2,449	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
8 OU-45163	FLAT	1/2'' x 6	SAE1018	2,445	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
9 OU-45163	FLAT	1/2'' x 8	SAE1018	2,427	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
10 OU-45163	FLAT	3/4'' x 6	SAE1018	2,401	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
11 OU-45163	FLAT	3/4'' x 8	SAE1018	2,423	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
12 OU-45163	FLAT	1'' x 5	SAE1018	2,668	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
13 OU-45163	FLAT	1'' x 6	SAE1018	2,458	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
14 OU-45163	FLAT	1'' x 8	SAE1018	2,284	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
15 OU-45163	FLAT	2'' x 2.1/2	SAE1018	2,469	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
16 OU-45163	FLAT	2'' x 3	SAE1018	2,227	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
17 OU-45163	FLAT	2'' x 4	SAE1018	2,304	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
18 OU-45163	RD	1.1/8 (1,1244''-1,1240'')	SAE1018	2,072	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
19 OU-45163	SQ	1.1/4 (0,0000''-0,0000'')	SAE1018	2,787	ACCORDING TO NORM ASTM A-108-13 LEVEL 1
20 OU-45163	SQ	2.1/2 (0,0000''-0,0000'')	SAE1018	2,831	ACCORDING TO NORM ASTM A-108-13 LEVEL 1

Chemical Composition According to EN 10204-2.2

Heat N°.	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Mo	%Pb	%Al	%Cu	%N	%Sn	%Ti
1 110640	0.068	0.012	1.150	0.048	0.285	0.022	0.027	0.009	0.282	0.003	0.044			
2 CE579934	0.160	0.160	0.730	0.013	0.016	0.090	0.120	0.017		0.004	0.330	0.011	0.016	
3 888562	0.166	0.273	0.799	0.009	0.026	0.067	0.024	0.007		0.026	0.027	0.005		
4 888562	0.166	0.273	0.799	0.009	0.026	0.067	0.024	0.007		0.026	0.027	0.005		
5 CE572896	0.160	0.160	0.730	0.009	0.017	0.070	0.090	0.014		0.003	0.210	0.012	0.007	
6 40204	0.155	0.210	0.760	0.022	0.017	0.160	0.080	0.020		0.012	0.160		0.009	
7 3067060	0.162	0.195	0.779	0.012	0.014	0.092	0.176	0.045		0.019	0.233		0.009	
8 CE577933	0.160	0.170	0.750	0.012	0.013	0.070	0.110	0.018		0.003	0.240	0.012	0.011	
9 3066237	0.150	0.221	0.804	0.011	0.006	0.135	0.170	0.064	0.001	0.016	0.193		0.012	
10 CE578591	0.160	0.150	0.740	0.013	0.020	0.070	0.100	0.025		0.003	0.210	0.013	0.009	
11 3066236	0.152	0.211	0.801	0.008	0.006	0.094	0.122	0.038	0.001	0.016	0.193		0.013	
12 3067061	0.156	0.183	0.787	0.011	0.016	0.109	0.180	0.053		0.018	0.229		0.009	
13 3066812	0.150	0.174	0.754	0.007	0.009	0.142	0.164	0.062	0.001	0.017	0.191		0.008	
14 3066287	0.156	0.236	0.826	0.010	0.007	0.147	0.166	0.044	0.001	0.018	0.273		0.012	
15 3064756	0.155	0.213	0.776	0.011	0.008	0.088	0.150	0.037		0.018	0.220		0.010	0.003
16 3063925	0.155	0.211	0.787	0.024	0.005	0.219	0.221	0.065		0.018	0.208		0.009	0.005
17 3065409	0.158	0.201	0.727	0.008	0.009	0.132	0.202	0.057		0.018	0.233		0.010	0.004
18 109543	0.160	0.126	0.715	0.010	0.010	0.073	0.070	0.008		0.003	0.146	0.009		
19 V37878	0.163	0.252	0.773	0.011	0.004	0.113	0.215	0.049		0.025	0.287		0.014	
20 41718	0.165	0.230	0.800	0.015	0.011	0.150	0.070	0.010		0.012	0.160		0.008	0.002

STEEL FREE OF MERCURY AND ANY RADIOACTIVE SUBSTANCES

Quality Management



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 326654 5

Customer: 007060 500

Date: 8/24/2017 Page: 1

Steel: 304/304L

Finish: CD

Corrosion: ASTM A262/15 Prac A/E OK

Your Order: C110194

NAS Order: PN 0082353 03

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30400/30403 EN 10204 3.1, ASTM A484/16
ASTM A276/17, ASTM A479/17, ASTM A182/16a CHEM ONLY,
ASME SA479/17, ASME SA182/16a CHEM ONLY
AMS 5639J, AMS 5647J, AMS QQS-763D, QQS-763F, ASTM F899/12b
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8
ASTM A193/10A-ASME SA193/10 CL 1 GR B8

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BI8786 3		.5000		1,239	144.00	11	1	

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
430W 5	US	.020	.16	18.18	.36	1.35	.32	.078	8.56	.030
9-80		S %	SI %							
		.0206	.24							

MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BI8786 3	R L	220.0	95.00	108.00	52.00	41.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS

Technical
Dept. Mgr

LES ACIERS OUELLETTE INC.
 BARRE RONDE ALUMINIUM 6061-T6511
 1.375" DIA X 144.0000"
 PART NO.

PO/Rel/AC00003645
 Nous certifions que le document reproduit ici est
 une copie conforme du rapport fourni par le
 fournisseur du matériel ou les données résultent

Certificate of Mill Test Results

BL VIM-502522-001

3Mar17
 Pg 1/1

de l'analyse faite par un laboratoire qualifié
 SIGNE PAR: LUCY TRUGLIO



Service Center Metals

5850 Quality Way
 Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER	ITEM
273289	1

MANIFEST NUMBER
 309100

DIE NUMBER
 RD0009

DATE OF SHIPMENT
 9/29/2016

CERTIFICATION
 ASTM-B221-14 StencilCont

CUSTOMER PO
 VIM-637658

ALLOY / TEMPER
 6061-T6511

SALESPERSON
 D.Schroeder (Canada)

SPECIFICATION
 AMS-QQA-200/8 Rev-A

Quantity Certified 1,028 lbs 49 pcs

CUSTOMER PART NUMBER
 RD0009

DESCRIPTION
 Lightning Rod Tite 1.375 +.005/- .004

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6. This product is RoHS-2, REACH, and DFARS compliant.

Mechanical Properties

Tests	Lot No.	DAS	Test Date	Ultimate Tensile Strength (KSI)		Yield Strength (KSI)		Percent Elongation	
				min	max	min	max	min	max
5	201616218	5 9-89	9/29/16	48.80	50.60	45.50	47.80	14.30	17.78

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	AL	Others		Melt Source:
												Each	Total	
09181601	201616218	6061	0.75	0.35	0.31	0.10	0.90	0.15	0.06	0.02	97.36	0.05	0.15	United States of America

SCM products are melted and extruded in the USA

Calvin J. Wiggins, Director of Quality & Technical Services

Print Date: 9/29/2016

Rev 6/2/14

Union Drawn Steel II LP

1350 Burlington Street East, P.O. Box 98

Hamilton, Ontario, Canada L8N 3A2

Phone: (905) 547-4480; Fax: (905) 544-3852

1-800-263-9966

CERTIFICATE OF ANALYSIS CERTIFICAT D'ANALYSE

DATE 05/05/17

CUSTOMER ORDER NO.
NO. DE LA COMMANDE DU CLIENT

B 98913

MILL ORDER NO.
NO. DE LA M'LL 259802-00

PRODUCT DESCRIPTION
PRODUIT DESCRIPTION

BILL OF LADING
BON DE CONNAISSANCE

L 94 FE10329343 YOUR ITEM # : V715412

3/4 RD 1144 20/22 FT

COLD FINISHED STEEL BARS CARBON
COLD DRAWN & STRESS RELIEF ANNEALED
"CENTURY" ASTM A311 CLASS B
STANDARD AISI TOLERANCES
C .40/.48 MN 1.35/1.65 P .040MAX S .24/.33
TRANSPORT BY TRUCK - PROTECT WITH TARP
CHEMICAL & MECHANICAL TEST REPORT REQUIRED
ASTM A108

COUNTRY OF ORIGIN - CANADA
HOT ROLL SOURCE : ARCELORMITTAL
NAFTA CERTIFIED YES: X NO:

LADLE ANALYSIS/ANALYSE DE LA COULLEE A COULER

HEAT NUMBER C124677	C.	.420	MN.	1.380	P.	.008	S.	.258
	SI.	.200	CU.	.030	NI.	.020	CR.	.020
	CB.		V.	.004	MO.	.004	PB.	
	B.		AL.	.001	SN.	.006		

MECHANICAL PROPERTIES/PROPRIÉTÉS MÉCANIQUES

HEAT NUMBER C124677

YIELD STRENGTH
LIMIT D'ÉLASTICITÉ

P.S.I. @ .2% OFFSET

TENSILE STRENGTH
RÉSISTANCE À LA TRACTION

P.S.I.

ELONGATION (2 INCHES)
ALLONGEMENT

%

REDUCTION OF AREA
STRICTION

%

HARDNESS
DURETÉ

☐ MAG
TEST

☐ ROTO
TEST

☐ ULTRA
SONIC TEST

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HAS BEEN TESTED IN ACCORDANCE WITH SPECIFICATION, AND THAT THE RESULTS ARE CORRECT AS CONTAINED IN THE RECORDS OF THE COMPANY.

PAR LES PRÉSENTES NOUS CERTIFIONS QUE LA MATIÈRE DÉCRITE A ÉTÉ TESTÉE CONFORMÉMENT AUX SPÉCIFICATIONS ET QUE LES RÉSULTATS SONT CORRECTS. COMME INDiqué DANS LES REGISTRES DE LA COMPAGNIE.

PER/PAR

NO WELDING OR WELD REPAIR PERFORMED ON THIS MATERIAL.
THIS MATERIAL WAS NOT EXPOSED TO MERCURY DURING
PROCESSING OR WHILE IN OUR POSSESSION.



**NIAGARA
LASALLE**
CORPORATION

1412 150th Street
Hammond IN 46327-1799

CERTIFICATION

CERTIFICATE	Rev
H174279	3
DATE	10/14/16
PAGE	4

PURCHASE ORDER **B96671**

ORDER **914660-2**

CUSTOMER ITEM **V876642**

ITEM **110625132SP4**

GRADE **STRESSPROOF(R)**

SHAPE **Round**

SIZE **.6250**

SIZE MM **15.8750 MM**

LENGTH **11' 0"/12' 6"**

LENGTH MM **3352.8 / 3810**

STRESSPROOF(R) Spec/Rev: Spec/Rev: ASTM A108-13 Spec/Rev: ASTM A29/A29M-15 Spec/Rev: ASTM A311-04(2010) CLASS B

HEAT		GRAIN PRACTICE		SOURCE / MELTED				CAST		REDUCTION RATIO		DI									
20446680		COARSE		CHARTER STEEL - OHIO (USA)				STRAND		159.7:1											
CHEMISTRY																					
C		MN		P		S		SI		NI		CR		MO		CU		AL		V	
0.410		1.380		.011		.284		0.200		0.040		0.080		.010		.100		.001		.002	
N		TE		AS		PB		SE		BI		B		NB							
.005		N/A		N/A		N/A		.008		N/A		.0001		.0010							
MECHANICAL																					
JOB		TENSILE		.2% YIELD		ELONG		R OF A		HARDNESS		.02% YIELD		SR TEMP							
HS43481		126,404 PSI		103,680 PSI		8.20		32.90		HRC = 25											
LOT																					
LOT		JOB		WEIGHT (LBS)		PIECES				LOT		JOB		WEIGHT (LBS)		PIECES					
6259176		HS43481		4,005		307															

WE, hereby certify that these goods were produced in compliance with all applicable requirements of sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders of the United States Department of Labor issued under section 14 thereof. Material was not exposed to mercury or any metal alloy that is liquid at ambient temperature during processing or while in our possession. No weld repairs performed on the above material.

CERTIFICATE OF TEST

By:

Walter P. Kretzler - Director of Q.A./Chief Metallurgist

Union Drawn Steel II LP

1350 Burlington Street East, P.O. Box 98
Hamilton, Ontario, Canada L8N 3A2
Phone: (905) 547-4480; Fax: (905) 544-3852
1-800-263-9966

CERTIFICATE OF ANALYSIS CERTIFICAT D'ANALYSE

DATE 12/21/16

CUSTOMER ORDER NO.
NO. DE LA COMMANDE DU CLIENT

B 97554

MILL ORDER NO.
NO. DE LA MALL 256818-00

PRODUCT DESCRIPTION
PRODUIT DESCRIPTION

BILL OF LADING
BON DE CONNAISSANCE

L 97 FE14829343 YOUR ITEM # : V719952

1 RD 1144 20/22 FT

"CENTURY"
COLD FINISHED STEEL BARS CARBON
COLD DRAWN AND STRESS RELIEVE ANNEALED
STANDARD AISI TOLERANCES
C .40/.48 MN 1.35/1.65 P .040MAX S .24/.33
TRANSPORT BY TRUCK - PROTECT WITH TARP
CHEMICAL & MECHANICAL TEST REPORT REQUIRED
ASTM A108 / A311 CLASS B
FINE GRAIN

COUNTRY OF ORIGIN - CANADA
HOT ROLL SOURCE : HAMILTON SPECIALTY BAR
NAFTA CERTIFIED YES: X NO:

LADLE ANALYSIS/ANALYSE DE LA COUILLER A COULER

HEAT NUMBER 015380	C.	.420	MN.	1.480	P.	.009	S.	.279
DAS	SI.	.200	CU.	.160	NI.	.070	CR.	.080
5	CB.		V.		MO.	.026	PB.	
9-89	B.		AL.		SN.			

MECHANICAL PROPERTIES/PROPRIÉTÉS MECANQUES

HEAT NUMBER 015380

YIELD STRENGTH
LIMIT D'ELASTICITE 123000 P.S.I. @ .2% OFFSET

TENSILE STRENGTH
RESISTANCE A LA TRACTION 134000 P.S.I.

ELONGATION (2 INCHES)
ALLONGEMENT 12.000 %

REDUCTION OF AREA
STRICTION 33.000 %

HARDNESS
DURETE 255 HB

☐ MAG
TEST

☒ ROTO
TEST

☐ ULTRA
SONIC TEST

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HAS BEEN TESTED IN ACCORDANCE
WITH SPECIFICATION, AND THAT THE RESULTS ARE CORRECT AS CONTAINED IN THE
RECORDS OF THE COMPANY

PAR LES PRÉSENTES NOUS CERTIFIONS QUE LA MATIÈRE DÉCRITE A ÉTÉ TESTÉE
CONFORMÉMENT AUX SPÉCIFICATIONS ET QUE LES RÉSULTATS SONT CORRECTS COMME
INDIQUÉ DANS LES REGISTRES DE LA COMPAGNIE

NO WELDING OR WELD REPAIR PERFORMED ON THIS MATERIAL.
THIS MATERIAL WAS NOT EXPOSED TO MERCURY DURING
PROCESSING OR WHILE IN OUR POSSESSION.

PER/PAR

[Signature]

Eaton Steel Bar Company Inspection Certificate 1616494

EN 10204:2004-3.1

BOL	Ship Date	Customer PO	Item	Customer Item	Item Description
200750	20-Oct-2016	896792	11142 rev 005	V012132	1 HR RD 4140/42MM 24ftlin SBO QTSF FG MST

All bundles listed below were produced using steel from Heat C129427 Issued by MITTAL CANADA and were completed from Eaton Steel Job 800877.

Chemistry	Description	Value	Units	Heat Treating	Description	Value	Units
C	Carbon	0.41000	PACT	TEMPER TEMP F	Temper Temp in Fahrenheit	500 - 2500	DECF
Mn	Manganese	0.92000	PACT	AUSTEN TEMP F	Austenitize Temp in Fahrenheit	1600 - 1700	DECF
P	Phosphorus	0.00600	PACT	SR TEMP F	Stress Relief Temp in Fahrenheit	500 - 2500	DECF
S	Sulfur	0.01100	PACT	MAGNETISM-RT	Magnetism in Gauss	0 - 20	GN
Si	Silicon	0.22000	PACT	TIME AT TEMP	Time at Temperature	Report	
Ni	Nickel	0.03000	PACT	QUENCH MEDIA	Quench Media Requirements	PLW/O	
Cr	Chromium	0.95000	PACT	STRESS FREE	Cert stress free	CERTIFIED	
Mo	Molybdenum	0.17000	PACT	HT4140-420T	Quench & Temper	CONFORMS	
Al	Aluminum	0.00300	PACT	Mill Processing	Description	Value	Units
Cu	Copper	0.08000	PACT	HEAT COUNTRY	Melted in Country	CAN	
V	Vanadium	0.02500	PACT	ROLLED COUNTRY	Rollled in Country	CAN	
N	Nitrogen	0.00300	PACT	RED RATIO	Production Ratio	18.00	RED
P+S	Element Sum Limit	0.00560	PACT	ASTM Standard	Description	Value	Units
DI	Ideal Diameter	0.02000	PACT	A191/191M-01	Grade B7	CONFORMS	
Cleanliness	Description	5.06000	IN	A332-13	Steel Bars, Alloy, Standard Grades	CONFORMS	
MACRO ETCH	Report macro etch results.	Value	Units	A334-90A-8C	ASTMA 8C Tensile and Yield properties	CONFORMS	
Geometry	Description	Value	Units	Structure	Percent Tempered Martensite	Value	Units
DIAMETER	Diameter	0.9910 - 1.0090	IN	MICROSTRUCTURE	Reported Microstructure	80 - 100	PCT
Joining	Description	Value	Units	Tag Number	Qty/Units	Length	
J1	1/16 inch from Quenched End	55	HRC	022-1872012	8125 LBS	24ftlin	
J2	2/16 inch from Quenched End	55	HRC				
J3	3/16 inch from Quenched End	55	HRC				
J4	4/16 inch from Quenched End	55	HRC				
J5	5/16 inch from Quenched End	55	HRC				
J6	6/16 inch from Quenched End	54	HRC				
J7	7/16 inch from Quenched End	53	HRC				
J8	8/16 inch from Quenched End	52	HRC				
J9	9/16 inch from Quenched End	52	HRC				
J10	10/16 inch from Quenched End	49	HRC				
J11	11/16 inch from Quenched End	46	HRC				
J12	12/16 inch from Quenched End	43	HRC				
J14	14/16 inch from Quenched End	40	HRC				
J16	16/16 inch from Quenched End	39	HRC				
J18	18/16 inch from Quenched End	37	HRC				
J20	20/16 inch from Quenched End	37	HRC				
J22	22/16 inch from Quenched End	37	HRC				
J24	24/16 inch from Quenched End	37	HRC				
J28	28/16 inch from Quenched End	37	HRC				
J32	32/16 inch from Quenched End	37	HRC				
Mechanical	Description	Value	Units				
TENSILE PSI	Tensile Strength in PSI Units	146100	PSI				
YIELD PSI	Yield Strength in PSI Units	136600	PSI				
ELONGATION	Percent Elongation	21.00	PCT				
REDUCTION	Percent Reduction in Area	62.0	PCT				
BRINELL SURF	Brinell Surface	294.0	BHN				

Bundle tags with Eaton Steel identifiers reference the steel grade, heat, purchase order number, part number, product description and weight. Tested and certified in accordance with Eaton Steel's Quality Manual QM-00001 / Rev 3 / 226.13

We hereby certify the above to be in conformance, and a true copy of data represented in company records. This steel was not subject to weld repair or exposed to mercury while in the possession of Eaton Steel.
 Created on 20-Oct-2016
 Thomas Snabes, Corporate Metallurgist
 This document was prepared by means of electronic data processing and is valid without signature.
 10221 Capital Avenue, Oak Park, MI 48237 USA
 http://www.eatonsteel.com
 Tel: 248-398-3434
 Fax: 248-398-1434

Certificat d'essai/ Test Certificate

ArcelorMittal

Usine de Longueuil / Longueuil Works

Vendue à - Sold to BAYON STEEL CORPORATION 10221 Capital OAK PARK MI 48237 ETATS-UNIS	Expédié à - Shipped to Apollo Heat Treat 10400 Capital Street OAK PARK MI 48237 USA
---	---

No de com. Sale order 159030	No de bonifié comm. Customer Order 155450	Connaissance Bill of lading 80915367	Date expé. Date shipped 2016/04/18	Date du part. Certificate Date 2016/04/18	No de Certificat Certificate no. 0000405899
------------------------------------	---	--	--	---	---

Arce - Description Item 000001 550 Bars, Rounds, Cut to Length 1.000" 4140 / 42M 25'00" 4140 / 42M	No Material - No Mat. Material No. Bar No. 21010908 10913	Poids expé. Net Weight 33,040Lb	Coulee - Heat Heat No. C120427_1
--	---	---------------------------------------	--

ANALYSE CHIMIQUE - CHEMICAL ANALYSIS (%)

Coulee/Heat:	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Nb	Alc	Als
C120427_1	0.41	0.92	0.008	0.014	0.22	0.08	0.03	0.95	0.170	0.025	0.003	0.003	0.003
Coulee/Heat:	N	Sn	Ti	B	Ca	Pb	As	Co	Sb	Bi	DI	C.E.	Dev
C120427_1	0.0056	0.008	0.002	0.0001	0.0023	0.000	0.002	0.003	0.001		5.06		

ESSAI JOMINY - JOMINY TEST (HRC)

Coulee/Heat:	J8	J1	J2	J3	J4	J5	J6	J7	J10	J12	J14	J16	J20	J24	J28	J32
C120427_1		55.9	55.7	55.3	55.2	55.0	54.7	53.3	52.0	49.5	46.2	43.0	40.6	39.1	37.7	37.4

PROPRIÉTÉS MÉCANIQUES - MECHANICAL PROPERTIES

Coulee	Grain size	Reduc.
Heat		Ratio
C120427_1	5-8	38.0

Remarques/Remarks

This steel was made in Canada

We hereby certify that the material shipped on the above order has been tested and or inspected in compliance with the above noted material specification.

This material have been melted and rolled in CANADA.

GRAIN SIZE

Austenitic Grain Size : 6 or finer (ASTM E-112)

Signature:

Metalurge (A/C)

Metalurge (O/A)



Vulcan Threaded Products
10 Cross Creek Trail
Pelham, AL 35124
Tel (205) 820-5100
Fax (205) 820-5150

JOB MATERIAL CERTIFICATION

Job No: 495009 Job Information
Containers: S11536245 S11537138 S11537960 S11539582

Certified Date: 10/8/16

Customer: Eaton Steel Corporation

20601 Trolley Industrial
Ship To: Drive
Taylor, MI 48180

Vulcan Part No: HRB 4140 1.000x296 Q&T ES
Customer Part No: 11142-005
Customer PO No: 157267-800877
Order No: 291040
Note:

Shipped Qty: 32427 lbs
Line No: 1

WO # 800877

Applicable Specifications

Type	Specification	Rev	Amend	Option
Heat Treat	Eaton Steel Spec			
Quality	EN 10204 3.1	2004		

Test Results

Part No: HRB 4140 1.000x296 Q&T ES

Test No: 39816 Test: Quench & Temper Physicals (KSI)

Description	Tensile (ksi)	Yield 0.2% Offset (ksi)	Elongation (%)	Elongation Gage Length	ROA (%)	Midradius Hardness	Surface Hardness	Center Hardness	Hardness Test Type	Note
	146.1	136.6	21	4D	62	32	31	31	HRC	
	145.8	136.3	18	4D	59	32	31	31	HRC	
	145.8	136.5	20	4D	62	32	31	32	HRC	
	144.9	134.6	20	4D	62	30	30	31	HRC	

Test No: 39815 Test: Quench & Temper Information (Lbs)

Description	Tempering Temp (F)	Run Speed (F/min)	Quench Water Temp (F)	Note
Quench & Temper Information Results	1,329	42	88	

Certified Chemical Analysis

Heat No: C120427										Origin: Canada			
C	Mn	P	S	Si	Cr	Mo	Ni	V	Cu	Al	Nb	Sn	
0.410	0.92	0.006	0.014	0.22	0.95	0.17	0.03	0.025	0.08	0.003	0.003	0.008	
Ti	N	B	Cu	As	Sb	Cl	PR	G.S.	J1	J2	J3	J4	
0.002	0.0056	0.0001	0.0023	0.002	0.001	5.06	38.0.1	6	56	56	56	55	
J5	J6	J8	J10	J12	J14	J16	J20	J24	J28	J32			
56	55	53	52	50	48	43	41	39	38	37			

Notes

Document is in accordance with EN 10204 - 3.1B of 2004 (3.1).

Gutman, Mike - Material Testing and Tech. Support Manager

10/8/16

Date

File: 10/8/16 9:43 AM vulc.mgmt Page 1

cert 403425

#166509

Eaton Steel Bar Company Inspection Certificate 1601418

EN 10204:2004-3.1

Customer	BOL	Ship Date	Customer PO	Item	Customer Item	Item Description
	201063	27-Oct-2016	896887	11132 rev 004	V016262	1-3/4 HR RD 4140/42MM 24R SBQ QTSF FG MST

All bundles listed below were produced using steel from Heat 166509 issued by ALTON STEEL and were completed from Eaton Steel Job 799489.

Chemistry	Description	Value	Units	Heat Treating	Description	Value	Units
C	Carbon	0.41000	FWGT	TEMPER TEMP F	Temper Temp in Fahrenheit	500 - 2500	DEGF
Mn	Manganese	0.89000	FWGT	AUSTEN TEMP F	Austenitize Temp in Fahrenheit	1600 - 1700	DEGF
P	Phosphorus	0.01400	FWGT	SR TEMP F	Stress Relief Temp in Fahrenheit	500 - 2500	DEGF
S	Sulfur	0.02200	FWGT	MAGNETISM-HT	Magnetism in Gauss	0 - 20	GN
Si	Silicon	0.23000	FWGT	TIME AT TEMP	Time at Temperature	Report	
Ni	Nickel	0.10900	FWGT	QUENCH MEDIA	Quench Media Requirements	P&H/O	
Cr	Chromium	0.84600	FWGT	STRESS FREE	Cert stress free	CERTIFIED	
Mo	Molybdenum	0.16200	FWGT	HT4140-42QT	Quench & Temper	CONFORMS	
Al	Aluminum	0.00100	FWGT	Mill Processing	Description	Value	Units
Cu	Copper	0.23000	FWGT	MELT COUNTRY	Melted in Country	USA	
V	Vanadium	0.02800	FWGT	ROLLED COUNTRY	Rolled in Country	USA	
Co	Columbium	0.00200	FWGT	RED RATIO	Reduction Ratio	20.37	RED
N	Nitrogen	0.01000	FWGT	ASTM Standard	Description	Value	Units
P+S	Element Sum Limit	0.03600	FWGT	A193/193M-G1	Grade B7	CONFORMS	
DI	Ideal Diameter	4.97000	IN	A434-90a-BC	ASTM BC Tensile and Yield properties	CONFORMS	
Cleanliness	Description	Value	Units	Structure	Description	Value	Units
MACRO ETCH	Report macro etch results.			PERCENT TM	Percent Tempered Martensite	80 - 100	PCT
Geometry	Description	Value	Units	MICROSTRUCTURE	Reported Microstructure	TM	
DIAMETER	Diameter	1.7344 - 1.7656	IN	Tag Number	Qty Units	Length	
Jominy	Description	Value	Units	022-1875938	4155 LBS	23ft36in/24ft31in	
J1	1/16 inch from Quenched End	56	HRC				
J2	2/16 inch from Quenched End	56	HRC				
J3	3/16 inch from Quenched End	56	HRC				
J4	4/16 inch from Quenched End	56	HRC				
J5	5/16 inch from Quenched End	56	HRC				
J6	6/16 inch from Quenched End	55	HRC				
J7	7/16 inch from Quenched End	54	HRC				
J8	8/16 inch from Quenched End	52	HRC				
J9	9/16 inch from Quenched End	51	HRC				
J10	10/16 inch from Quenched End	50	HRC				
J11	11/16 inch from Quenched End	0.06000	HRC				
J12	12/16 inch from Quenched End	47	HRC				
J14	14/16 inch from Quenched End	45	HRC				
J16	16/16 inch from Quenched End	43	HRC				
J18	18/16 inch from Quenched End	42	HRC				
J20	20/16 inch from Quenched End	41	HRC				
J22	22/16 inch from Quenched End	0.07000	HRC				
J24	24/16 inch from Quenched End	40	HRC				
J26	26/16 inch from Quenched End	37	HRC				
J32	32/16 inch from Quenched End	35	HRC				
Mechanical	Description	Value	Units				
TENSILE PSI	Tensile Strength in PSI Units	151300	PSI				
YIELD PSI	Yield Strength in PSI Units	130300	PSI				
ELONGATION	Percent Elongation	19.00	PCT				
REDUCTION	Percent Reduction in Area	55.0	PCT				
BRINELL SURF	Brinell Surface	321.0	BHN				

Bundle tags with Eaton Steel identifiers reference the steel grade, heat, purchase order number, part number, product description and weight. Tested and certified in accordance with Eaton Steel's Quality Manual QM-00001 / Rev 3 / 2/25/13.

We hereby certify the above to be in conformance, and a true copy of data represented in company records. This steel was not subject to weld repair or exposed to mercury while in the possession of Eaton Steel.

Created on 27-Oct-2016
Thomas Snabes, Corporate MetallurgistThis document was prepared by means of electronic
data processing and is valid without signature.10221 Capital Avenue, Oak Park, MI 48237 USA
<http://www.eatonsteel.com>Tel: 248-398-3434
Fax: 248-398-1434

Lab Services Report



10221 Capital Avenue
Oak Park MI 48237
(248)543-3578 telephone
(248)398-1434 facsimile

Bill To: Apollo Heat Treating
10400 Capital Avenue
Oak Park, MI

Ship To: Apollo Heat Treating
10400 Capital Avenue
Oak Park, MI

Attn: Randy Call
rcall@apollohlp.com

Report Date: 10/14/2016
Report ID: 16-3002
Request ID:

This report contains results for the indicated services performed on the following sample(s):

Part No	11132 QTSP	Finish	HR	Shape	Round
Size	1-3/4	Grade	4140	Work Order	799489

Titan Sample ID	Heat	Customer Sample ID
16-3002-1	168509	WO 799489 Job 2167

Steve Avery

Report Approved By: Steve Avery

Mechanical Testing

ASTM E8M-15a ASTM E10-15



Mechanical Testing

ASTM E8M-15a ASTM E10-15

Sample ID	Ultimate Tensile, psi	0.2% Offset Yield, psi	Elongation - Manual, %	Reduction of Area, %	HBW Surface
16-3002-1	151,300	138,300	19	55	321

Test Comments

Mechanicals tested at Mid Radius

Any services within a social network with * are not part of Titan Malware's current A2LA inspection.
All testing performed by Titan Malware was done in accordance with ISO 9001:2015.

Report ID: 16-3002
Page 2 of 2



10400 Capital Avenue • Oak Park, Michigan 48237 • (248) 398-3434

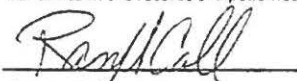
CERTIFICATION OF HEAT TREATMENT

Date: 10 / 17 / 2016
Certification Number: 16 - 0467
Customers Order Number: 799489
Part Number: 10902 - 11132
Heat Number: 166509
Heat Treat Job Number: 2167

Material: 4140
Quantity: 206 Pcs.
Weight: 41,080 Lbs.
Description: 1.7500" Diameter x 24' 2" Length
Per Specification: ESHT HT4140 - 42QT

	Temperature	Time at Heat	Coolant
Normalized	N/A		
Preheat	N/A		
Austenitized/Hardened	1600 °F	45 Minutes	
Spray Quenched	102.8 °F - 104.8 °F	N/A	Water
Temper	1220 °F	1 Hour 15 Minutes	Air Cooled to Ambient
Temper	N/A		

Method of heat treat monitor, set point thermocouple (Type K). Equipment calibrated per AMS2750E.
We hereby certify the above material has been treated in the manner described are correct as
contained in the records of Apollo Heat Treating and Processing, LLC.


Randy L. Call
Plant Manager
Apollo Heat Treating & Processing, LLC



53066 DART

**ACIER
FUSION
STEEL**

**Chemical certification
Certification chimique**

P0.9652

8231 de L'Industrie
Anjou, Montréal (Québec)
H1J 1X8

Tél.: 514-286-9660 Fax: 514-354-2294

Order Num / No. Commande AC-9622	Vendor / Fournisseur 0	Country of origin / Pay d'origine SLOVENIA	Date 11/06/14	Heat / coulée 289214	AS 5 J-89	Material ID # / No. matériel
Grade / Nuance 4140 PLT	Conditions HEAT TREATED					
Shape / Forme FLT	Size / Dimension 0.500	Specifications ASTM A434 / SAE J404 / ASTM A829-06				

Chemical composition / Analyse chimique

Carbon (C)		Silicon (Si)		Manganese (Mn)		Phosphorus (P)	
Mini / maxi	0.3700 / 0.4400	Mini / maxi	0.1500 / 0.3500	Mini / maxi	0.6500 / 1.1000	Mini / maxi	0.0100 / 0.0190
Actuel %	0.415	Actuel %	0.250	Actuel %	0.770	Actuel %	0.008
Sulphur (S)		Chromium (Cr)		Nickel (Ni)		Molybdenum (Mo)	
Mini / maxi	0.0200 / 0.0400	Mini / maxi	0.7500 / 1.2000	Mini / maxi	0.1000 / 0.2000	Mini / maxi	0.1500 / 0.2500
Actuel %	0.002	Actuel %	1.000	Actuel %	0.000	Actuel %	0.160
Cooper (Cu)		Vanadium (V)		Aluminum (Al)		Tungsten (W)	
Mini / maxi	0.1900 / 0.2900	Mini / maxi	0.0400 / 0.0500	Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000
Actuel %	0.000	Actuel %	0.040	Actuel %	0.000	Actuel %	0.000
Cobalt (Co)		Titanium (Ti)					
Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000
Actuel %	0.000	Actuel %	0.000	Actuel %	0.000	Actuel %	0.000

Mechanical properties / Propriétés Mécaniques

Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC	Surface Hd / Dureté
0.000 PSI	0.000 PSI	0.00	0.00		302-311 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut on été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

Prepared by: / Préparé par:



ESSAR STEEL ALGOMA INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4

SO No., Item & Date.: 8045450 000010 2016/09/08 Shipment No. & Date.: 1000211568 2016/09/07 TC No., Date & Time.: ESA-345728 2016/09/08 - 21:26:15

Sold to Customer Name and Address: LES ACIER TRANSBEC (1997) LTEE
BOUL LE CORBUSIER #201-4054
LAVAL, Quebec, Canada
H7L 5R2

Ship to Customer Name and Address: LES ACIER TRANSBEC (1997) LTEE
BOUL DU HAVRE 935
VALLEYFIELD, Quebec, Canada
J6S 5L1

Customer PO NO./Item: CA-46355 / 1
BOL NO.: 1000211568
Cust. Part No.:
Carrier: TRIPLE K TRANSPORT LTD - 25099 276

Customer Specification: HR STEEL PLATE HSLA CSA G40.21 44W (13) As Rolled Std Thickness Tol Structural Steel Top and Bottom Standard Surface Flatness 1/2 A6 Fine Grain Fully Killed

Supplementary Instructions: Test Cert 1: parcand@aciertransbec.com Test Cert 2: nathalie.legault@aciertransbec.com

Insp T/R: Test Report As Per Spec Cust Use: STRUCTURAL STEEL

ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES. THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705) 945-4065 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.

MEETS EN 10204:2004 TYPE 3.1
ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ESSARSTEELALGOMA.COM

ALL HEATS FULLY KILLED.
HEATS INDICATED WITH (*) FINE GRAINED.
HEATS INDICATED WITH (+) Made in Canada for NAFTA duty preference and NAFTA marking purposes

Dimensions (T x W x L)	Batch No.	Heat No.-MS	Quantity	Pcs
0.3130" x 96.000" x 240.00"	AX3927	0026C4-56	4,087 LB	2

Heat No. (wt%)	CHEMICAL PROPERTIES												
	C	Mn	P	S	Si	Cr	Ni	Cu	Mo	Al	Nb	V	Ti
0026C4*	0.14	1.05	0.009	0.004	0.290	0.02	0.01	0.03	0.00	0.032	0.000	0.000	0.004

MECHANICAL PROPERTIES												
Tensile Tests												
Heat No.	Batch No.	SRCE	LAB	GAUGE	COND	METH	DIR	LOC	YIELD(KSI)	TENSILE(KSI)	EL SCALE	ELONG(%)
0026C4		166"	ALG	0.3130	AR	.2	T	F	45.0	68.0	8"	28
0026C4		166"	ALG	0.3130	AR	.2	T	F	45.0	67.0	8"	28

KASHIF REHMAN
MANAGER METALLURGICAL SERVICES

****WARNING**** THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSES (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
25-SEP-2017

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
S697927

AC00009558
PART NUMBER/NUMÉRO DE PIÈCE
506031

SOLD TO: ACIER OUELLETTE INC
VENDU À:

SHIP TO:
EXPÉDIÉ À:

ACIER OUELLETTE INC.

22 BOULEVARD J-F KENNEDY
ST JEROME QC J7Y 4B6

22 BOULEVARD J F KENNEDY
SAINT JEROME QC J7Y 4

Description: 4142 CF HEAT TREATED S/R OR STRESS FREE BAR
1/2 RD X 12' R/L Line Total: 160 LB
HEAT: 190696 DAS ITEM: 506031

Specifications:

ASTM A434 CL BC 12

ASTM A193 GR B7 M

ASTM A108 13

ASTM A193 M15

ASTM A29-A29M 15

ASTM A304 11

ASTM A322 13

ASTM A331 95

ASTM A962/A962 14

EN 10204 04

CHEMICAL ANALYSIS

C	MN	SI	P	S	CR	NI	MO
0.42	0.97	0.26	0.011	0.022	1.04	0.20	0.23
CU	AL	CA					
0.17	0.026	0.0008					

RCPT: R294209

COUNTRY OF ORIGIN : SPAIN

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS BHN
	110.0	145.0	17.6	58.8	269

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut. The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
25-SEP-2017

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
S697927

AC00009558
PART NUMBER/NUMÉRO DE PIÈCE
506031

SOLD TO: ACIER OUELLETTE INC
VENDU À:

SHIP TO:
EXPÉDIÉ À:

ACIER OUELLETTE INC.

22 BOULEVARD J-F KENNEDY
ST JEROME QC J7Y 4B6

22 BOULEVARD J F KENNEDY
SAINT JEROME QC J7Y 4

Description: 4142 CF HEAT TREATED S/R OR STRESS FREE BAR
1/2 RD X 12' R/L Line Total: 160 LB

HEAT: 190696

ITEM: 506031

END-QUENCH HARDENABILITY (JOMINY - RC)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
60	60	60	59	59	58	58	57	57	56	56	55	55	54	54
16	18	20	22	24	26	28	30	32						
53	52	51	49	48	47	46	45	44						

GRAIN SIZE : 7 -

VACUUM DEGASSED MATERIAL IS FREE FROM MERCURY CONTAMINATION
EDDY CURRENT/MAGNETIC TEST PERFORMED
THERMAL TREATMENT: OK
QUENCHING 1.562 F, TIME: (1): 45MIN; COOLING: (1): OIL
TEMPERATURE MEDIA AT THE START: (1) 95 F: TEMPERATURE MEDIA
AT THE FINISH (1) 122 F
TEMPERING 1.202 F; TIME(2) 150 MIN COOLING (2) AIR
TEMPOF (3) STRESS RELIEVED 1.102 F(3) 120 MIN
MACRO: OK

COMMENTS

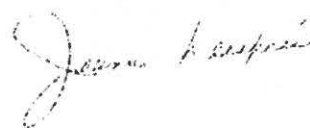
country of origin: spain
reduction ratio 167,8

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1018R2.250

PO / BATCH NO.: 0037858/5000798

DATE: OCT 18 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 2.250"

QUANTITY RECEIVED: 3'

THICKNESS RECEIVED: 2.250"

QUANTITY INSPECTED: 3'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	N	ASTM A108
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	5000798
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	H# 136550
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: DAS

SIGNED OFF BY: _____

DATE: OCT 18 2017

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 11018RG.750

PO / BATCH NO.: 037858/500799

DATE: OCT 18 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .750

QUANTITY RECEIVED: 19'

THICKNESS RECEIVED: .750

QUANTITY INSPECTED: 19'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	45m A108
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	HT #139625
CORRECT MATERIAL IDENTIFICATION	Y (N)	5000799
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 5</u> DATE: <u>OCT 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: m304 R.500
 DATE: OCT 18 2017

PO / BATCH NO.: m37x58/5000801

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 36'
 QUANTITY INSPECTED: 36'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .500
 THICKNESS RECEIVED: .500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A276
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	#430W
CORRECT MATERIAL IDENTIFICATION	(Y) N	5000801
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>5</u> DATE: <u>OCT 18 2017</u> <u>9-89</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 160614681375
 DATE: OCT 18 2017

PO / BATCH NO.: 0037858/Scg802

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.375
 THICKNESS RECEIVED: 1.375
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	ASTM-A221
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	#7# 201616218
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	Scg802
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>5</u>	SIGNED OFF BY: _____	
DATE: <u>OCT 18 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: mt-1144-RC.750
 DATE: OCT 18 2017

PO / BATCH NO.: 1037858/500808

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 10'
 QUANTITY INSPECTED: 10'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750
 THICKNESS RECEIVED: .750
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A311
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT# C124677
CORRECT MATERIAL IDENTIFICATION	(Y) N	500808
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>5</u> DATE: <u>OCT 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: Mt-1144-RO.625

PO / BATCH NO.: PO37858/SC00803

DATE: OCT 18 2017

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 10'
 QUANTITY INSPECTED: 10'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .625
 THICKNESS RECEIVED: .625
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	ASTM A311
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	Ht# 20446680
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y N	SC00803
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>5</u> DATE: <u>OCT 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-1144-R1,000

PO / BATCH NO.: PO37858/S000809

DATE: OCT 18 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 1"

QUANTITY RECEIVED: 10'

THICKNESS RECEIVED: 1"

QUANTITY INSPECTED: 10'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	ASTM A311
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	HT #315380
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	S000809
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>5</u> <div style="text-align: center; font-size: small;">989</div> DATE: <u>OCT 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R1,750

PO / BATCH NO.: 0037868/5000805

DATE: OCT 18 2017

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 3'
 QUANTITY INSPECTED: 3'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.750
 THICKNESS RECEIVED: 1.750
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A304
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT # 166509
CORRECT MATERIAL IDENTIFICATION	(Y) N	5000805
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 5</u> DATE: <u>OCT 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-HRS-p-0.3125

PO / BATCH NO.: po37858/5001352

DATE: OCT 23 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .3125

QUANTITY RECEIVED: 165sqft

THICKNESS RECEIVED: .3125

QUANTITY INSPECTED: 165sqft

SHEET SIZE ORDERED: 4x4

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 4x4

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	44w
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	H+ #002664
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____	
DATE: <u>OCT 23 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-RC,500

DATE: OCT 23 2017

PO / BATCH NO.: PO37858/S001353

MATERIAL CERT REC'D: 485

QUANTITY RECEIVED: 12

QUANTITY INSPECTED: 12

QUANTITY REJECTED: 0

THICKNESS ORDERED: .500

THICKNESS RECEIVED: .503

SHEET SIZE ORDERED: 11 / 11

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	Astm A304
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	H7 # 190696
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>5</u>	SIGNED OFF BY:	
DATE:	<u>OCT 23 2017</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

*
location
in part's
office

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1018B1.000Y6.000
DATE: OCT 19 2017

PO / BATCH NO.: 1037858/S000800

MATERIAL CERT REC'D: _____
QUANTITY RECEIVED: 6'
QUANTITY INSPECTED: 6'
QUANTITY REJECTED: 0

THICKNESS ORDERED: 1"
THICKNESS RECEIVED: 1"
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	<u>Y</u>	N	
CORROSION	Y	<u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u>	N	
CORRECT MATERIAL PER M-DRAWING	Y	<u>N</u>	* See note
CORRECT THICKNESS	<u>Y</u>	N	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u>	N	
CORRECT MATERIAL IDENTIFICATION	<u>Y</u>	N	
CORRECT M# ON THE MATERIAL	<u>Y</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<u>Y</u>	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

Acceptable For TOOLING ONLY
INSPECT PER M1010B

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>		SIGNED OFF BY: <u>[Signature]</u>	
DATE: <u>5</u> <u>9-09</u>	<u>OCT 19 2017</u>	DATE: <u>17/10/19</u>	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

*
ccg then
in pat's
office

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140N B0.500x1625

PO / BATCH NO.: 0037858/S000806

DATE: _____

MATERIAL CERT REC'D: _____
QUANTITY RECEIVED: 3'
QUANTITY INSPECTED: 3'
QUANTITY REJECTED: 0

THICKNESS ORDERED: .500
THICKNESS RECEIVED: .500
SHEET SIZE ORDERED: N/A
SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	(N)	*See Note
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	(Y)	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

Acceptable for tooling only

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: <u>OCT 19 2017</u>	SIGNED OFF BY: <u>CP-J</u> DATE: <u>17/10/19</u>

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

*
location
in Pat's
office

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R1,000

PO / BATCH NO.: 0037858/5000804

DATE: _____

MATERIAL CERT REC'D: _____

THICKNESS ORDERED: 1"

QUANTITY RECEIVED: 3

THICKNESS RECEIVED: 1"

QUANTITY INSPECTED: 3

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	(N)	*See note
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	(Y)	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

Acceptable
FOR TOOLING ONLY

QC 18 INSPECTION	DAS	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>5</u>	SIGNED OFF BY: <u>CPM</u>	
DATE: <u>OCT 10 2017</u>	DATE: <u>17/10/19</u>	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in